

REMARKS

Claims 1 and 4-20 are all the claims pending in the application. Claims 2 and 3 have been canceled without prejudice or disclaimer. Claims 10-20 have been newly added.

Specification

The abstract stands objected to as being too long. Applicant respectfully traverses the objection because the abstract is 144 words long, within the 150 word limit discussed in MPEP 608.01(b) and cited by the Examiner.

Claim Objections

Claims 2 and 3 stand objected to for failing to further define the claims they depend from. Applicant has canceled claims 2 and 3 rendering the objection moot.

Claim Rejections - 35 U.S.C. § 102

Claims 1-5 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,259,500 (Kijima et al.). Applicant respectfully traverses the rejection at least because Kijima fails to teach or suggest each and every feature of the claimed invention.

For example, claim 1 sets forth that a part of the liquid-crystal layer corresponding to a non-display region does not include any spacers. The Examiner asserts that Fig. 8B of Kijima teaches a non-display region without spacers. Although Fig. 8B may not explicitly illustrate spacers in the non-display region, it is clear from the specification that Kijima teaches spacers in the non-display region, including in the example shown in Fig. 8B.

Kijima is directed at trying to achieve a uniform cell thickness. In order to achieve this goal Kijima teaches supporting spacers on a surface of similar height in the non-display region as in the display region. (See column 5, lines 25-29) Kijima teaches that when the display region

and the non-display region support cell spacers at similar heights, a uniform cell thickness is achieved. (*See* column 4, lines 49-66 and column 5, lines 35-44) Since the purpose of Kijima is to provide uniform supports for spacers in both the display and the non-display regions, Kijima also teaches using spacers in both the display and the non-display regions. The use of spacers in both regions is consistent throughout the Kijima specification; including the summary of the invention, the preferred description of the embodiments and the specific examples given. The specification repeatedly teaches spacers being present in both the display region and the non-display region both in the Summary of the Invention, as cited above, and in the Description of the Preferred Embodiments. (*See* column 8, lines 24-32 and lines 40-42; column 12 line 65 to column 13 line 3) Since spacers in both the display and non-display regions are necessary for the purpose of the invention and consistently referenced with respect to the preferred embodiments, the specific examples would necessarily have this feature.

Additionally, Kijima specifically teaches a non-display region (38) with spacers (34) when referencing Example 1, which is illustrated in Fig. 8B. In discussing Example 1, Kijima makes it clear that cell spacers (34) are dispersed across the entire LCD device (200), including both the display region (37) and the non-display region (38). (*See* column 15, lines 5-13). Even if Fig. 8B does not specifically show a cell spacer (34) in the non-display region (38), it is clear from the Kijima specification that the non-display region that both the non-display region and the display region of the example of Fig. 8B includes spacers. At least in view of the above arguments, Kijima fails to teach each and every element of claim 1. Furthermore, it would not have been obvious to one of ordinary skill in the art to modify Kijima to have a non-display

region without spacers at least because Kijima teaches that the spacers are necessary for creating a uniform cell thickness.

Claims 4 and 5 depend from claim 1 and are allowable over the cited references at least because of their dependency. Claims 2 and 3 have been canceled, rendering their rejection moot.

Claim Rejections - 35 U.S.C. § 103

Claims 6-9 stand rejected under 35 U.S.C. § 103(a) allegedly being unpatentable over Kijima in view of U.S. Patent No. 5,978,061 (Miyazaki). Applicant respectfully traverses the rejections in view of the following arguments.

Claims 6-9 depend from claim 1 and nothing in Miyazaki makes up for the above noted deficiencies with regards to claim 1. Since the Kijima and Miyazaki combination fails to teach or suggest each and every element of independent claim 1, the combination certainly fails to teach or suggest every feature of dependent claims 6-9.

Additionally, the Examiner asserts that element 35 in Fig. 1 of Miyazaki teaches a depression which meets the depression of claim 6 and that element 34 in Fig. 1 of Miyazaki teaches a depression which meets the depression of claim 7. Even if, for the sake of argument alone, elements 34 and 35 were considered depressions, they are formed in an area corresponding to the display area. The depressions of claims 6 and 7 are formed in the second part of the liquid-crystal layer which corresponds to the non-display region.

Further, claim 8 sets forth that the depression has a height (H) which satisfies the relationship $H \geq (1/2) \times (1000 + L) \times [0.02d + [L \times (0.02d/1000)]]/L$ (μm); where L is the width of the non-display region and d is the average value of the gap in the display region. The Examiner does not assert that either Kijima or Miyazaki specifically teach or suggest a

depression that has a height which satisfies the relationship expressed in claim 8. Still, the Examiner asserts that it would have been obvious to one of ordinary skill in the art to modify the references satisfy the relationship expressed in claim 8 to suppress non-uniformity as taught by Kijima. However, even if Kijima were considered to have depressions, there is nothing in Kijima to suggest that the width of the non-display region or the gap in the display region would have any effect on the optimal height of any depression.

At least in view of the above arguments, claims 6-9 are allowable over the combined teachings of Kijima and Miyazaki.

New Claims

Applicant has added new claims 11-20 to more fully define the invention. The new claims are fully supported by the originally filed specification and do not add any new matter. Claim 10 depends from claim 4 and in view of the arguments above is allowable over the cited references at least because of its dependency. New claims 11-20 are allowable over the cited references at least because they set forth compressing a sealing member to approximately the same height as spacers provided in a display region.

Conclusion

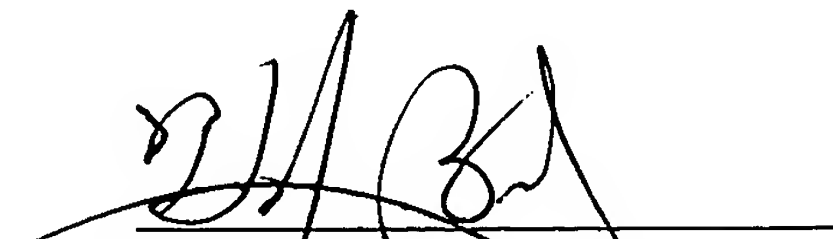
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 10/629,650

Q76784

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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